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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/829,438	04/20/2004	David Gast	200316296-1	8782

22879 7590 01/03/2007

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EXAMINER	
MARINI, MATTHEW G	
ART UNIT	PAPER NUMBER
2854	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	01/03/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	10/829,438	GAST ET AL.	
	Examiner	Art Unit	
	Matthew G. Marini	2854	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *20 April 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-49* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-49* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *20 April 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *4/20/04*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Specification

The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

The following title is suggested: Scanning an identifying pattern found a media stack.

Claim Objections

Claims 10 and 20 are objected to because of the following informalities: It appears that in claims 10 and 20, line 4 the word "form" should read --from--. Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-8 are rejected under 35 U.S.C. 102(b) as being anticipated by Morita et al. (JP 05-294483A).

As for claim 1, Mortia et al. teaches an apparatus in Fig. 1, comprising: a tray, C1-C5, for holding a media stack, P; a sensor, PC; and a transport mechanism, seen in Fig. 2a, comprising a motor, M2, and gearing, PG2 and R2, which moves the tray, C2, past the sensor, PC, to scan a top side of the media stack, B4.

As for claim 2, Mortia et al. teaches an apparatus in Fig. 1, further comprising a housing, II, and wherein the sensor, PC, is coupled to the housing, II, such that the

sensor, PC, is held stationary relative to the housing, II, as indicated in Fig. 2a; and the transport mechanism, as seen in Fig. 2a, comprising a motor, M2, and gearing, PG2 and R2, is coupled to the housing and the tray.

As for claim 3, Mortia et al. teaches an apparatus in Fig. 1, comprising: a tray, C1-C5, for holding a media stack, P; a transport mechanism, as seen in Fig. 2a, comprising a motor, M2, and gearing, PG2 and R2, operable to move the tray, C2, between a first position seen in Fig. 3a in which the media stack, B4, can be loaded onto the tray, C5, and a second position, Fig. 3b, in which a sheet, P, from the media stack, B2, loaded onto the tray can be fed into a print path, 120 of Fig. 1, of an imaging device, Fig. 1; and a sensor, PC, positioned so that it can scan a top side of the media stack, B2, as the transport mechanism, motor M2 and gearing PG2 and R2, moves the tray, C2, between the first and second positions, seen in Fig. A-B.

As for claim 4, Mortia et al. teaches an apparatus in Fig. 1, further comprising a support inherently holding the sensor, PC, stationary relative to the motion of the tray, C2, caused by the transport mechanism, motor M2 and gearing, PG2 and R2.

As for claim 5, Mortia et al. teaches an apparatus in Fig. 1, wherein the tray, C2, the transport mechanism, motor M2 and gearing PG2 and R2, and the sensor, PC, are components of the imaging device.

As for claim 6, Mortia et al. teaches an apparatus in Fig. 1, comprising: a tray, C2, for holding a media stack, B2; means for moving the tray, motor M2 and gearing PG2 and R2, between a first position and a second position, seen in Fig. 2a-b; and means, PC, for scanning a top side of the media stack, B2, with the tray, C2, between the first position and the second position, seen in Fig. 2a-b.

As for claim 7, Mortia et al. teaches an apparatus in Fig. 1, wherein: the media stack, B4, can be loaded onto the tray, C2, when the tray is in the first position, as seen in Fig. 3a; and a sheet, P2, form the media stack, B2, can be fed into a print path, 120 of Fig. 1, of an imaging device when the tray is in the second position, Fig. 3b.

As for claim 8, Mortia et al. teaches an apparatus in Fig. 1, wherein the means, PC, for scanning include means for scanning the top side of the media stack, B2, as the tray, C2, is moved between the first position and the second position, as seen in Fig. 2a-b.

Claims 9-25, 28-49 are rejected under 35 U.S.C. 102(b) as being anticipated by Rombult et al. (5,992,324).

As for claims 9 and 28, Rombult et al. teaches in Fig. 1 a data identification system, where the structure is capable of performing the method of claim 28 comprising: trays, 34 and 36, for holding a media stack, 24, the media stack, 24 having a side with a pattern, 187 in Fig. 7, to encode information related to data, Col. 4 lines 27-30; a transport mechanism, 40, operable to move the tray between a first position, in a lower section as seen in Fig. 1, and a second position, where the picker, 28, can remove a sheet from the stack, 24; a sensor, 61, positioned to scan the pattern, 187, as the transport mechanism, 40, moves the tray between the first position and the second position, before it is removed completely from the handler, 18; and logic coupled to the sensor, 61, and operable to decipher the pattern to identify the data, Col. 4 lines 27-41.

As for claims 10 and 29, Rombult et al. teaches in Fig. 1 a data identification system wherein the media stack, 24, can be loaded onto the tray when the tray is in the first position in the lower portion on the handler 18, Col. 4 lines 1-5; and a sheet, 26,

form the media stack, 24, can be fed into a print path in the imaging engine, 20, of an imaging device, 16, when the trays, 34 and 36, are in the second position at picker, 28.

As for claims 11 and 30, Rombult et al. teaches in Fig. 1 a data identification system further comprising a support, frame 48, as seen in if Fig. 2 holding the sensor, 61, stationary relative to the motion of the trays, 34 and 36, caused by the transport mechanism, 40.

As for claims 12 and 31, Rombult et al. teaches in Fig. 7 a data identification system wherein the pattern, 187, encodes a reference, i.e. information about the contained sheets, and the control logic couple to the system and sensor, 61, are operable to retrieve an entry in a look-up table corresponding the reference in the image engine, 20, the entry including the data which will control the motion of the handler 18, Col. 4 lines 27-41.

As for claims 13 and 32, Rombult et al. teaches in Fig. 7 a data identification system wherein the data, Col. 4 lines 16-27, found in the image engine includes parameter settings and the control logic is operable to decipher the pattern, 187, to identify the parameter settings according to the size and thickness of those sheets.

As for claims 14 and 33, Rombult et al. teaches in Fig. 7 a data identification system wherein the data, Col. 4 lines 16-27, a includes a media type, i.e. different sizes and thickness, and the control logic coupled to the image engine and sensor, 61, is operable to decipher the pattern, 187, to identify the media type, Col. 4 lines 27-41.

As for claims 15 and 34, Rombult et al. teaches in Fig. 7 a data identification system wherein the control logic coupled to the image engine and sensor, 61, is operable to select parameter settings according to the media type, Col. 4 lines 38-41.

As for claim 16, Rombult et al. teaches in Fig. 1 a data identification system wherein the trays, 34 and 36, the transport mechanism, 40, the sensor, 61, and the control logic are components of an imaging device, 16.

As for claims 17 and 38, Rombult et al. teaches in Fig. 1 a data identification system wherein the pattern, 187, includes a consecutive series of sub-patterns, bar code lines, with each sub-pattern, those bar code lines, encoding information relating to the data, Col. 4 lines 16-27, for the sheets, 24, on which that sub-pattern is formed, and wherein the control logic is operable to decipher each sub-pattern to identify the data relating to that sub-pattern, Col. 4 lines 27-41.

As for claims 18 and 39, Rombult et al. teaches in Fig. 1 a data identification system wherein the data found in the image engine, 20, includes an expected number of sheets of media, Col. 4 lines 16-27, in the media stack, 24, on which the pattern, 187, is imprinted, and the control logic is operable to decipher the pattern, 187, to identify the expected number of sheets in that media stack, 24.

As for claims 19 and 28, Rombult et al. teaches in Fig. 1 a data identification system wherein a print engine, 20, operable to form an image on a sheet of media, 26; a media source, 18, operable to supply a media stack, 24, the media source, 18, including: trays, 34 and 36, for holding the media stack, 24, the media stack, 24, having a side with a pattern, 187, encoding information corresponding to imaging data, Col. 4 lines 27-41; a transport mechanism, 40, operable to move the trays between a first position at the lower portion of the handler, 18, and a second position near the picker, 28; a sensor, 61, positioned to scan the pattern, 187, as the transport mechanism, 40, moves the tray between the first position and the second position for loading into the

imaging engine, 20; a transfer mechanism, 28, operable to transfer sheets of media, 26, from the media source, 24, to the print engine, 20, Col. 3 lines 61-67; control logic in communication with the media source, the print engine, and the transfer mechanism, Col. 4 lines 16-27, the control logic operable to identify the imaging data and to control the operation of transfer mechanism, 40, the operation of the print engine, 20, according to the imaging data, Col. 4 lines 16-41.

As for claim 20, Rombult et al. teaches in Fig. 1 a data identification system wherein the media stack, 24, can be loaded onto the tray when the tray is in the first position, Col. 4 lines 1-5; and a sheet, 26, form the media stack, 24, can be supplied to the print engine, 20, when the tray is in the second position at the picker, 28.

As for claims 21 and 35, Rombult et al. teaches in Fig. 1 a data identification system further comprising a user interface, 12 and 14, in communication with the control logic, software, and wherein the control logic is operable to cause the user interface to generate a display corresponding, at least indirectly, to the imaging data, Col. 4 lines 30-34.

As for claim 22, Rombult et al. teaches in Fig. 1 a data identification system wherein the control logic coupled to the software and sensor, 61, is operable to cause the user interface, 12, which is capable of generating a display that includes user selectable options corresponding, at least indirectly, to the imaging data, Col. 4 lines 30-34.

As for claim 23, Rombult et al. teaches in Fig. 1 a data identification system wherein the imaging data, Col. 4 lines 16-21, includes imaging parameter settings, the imaging device further comprising a user interface, 12, in communication with the

control logic and capable of displaying information to a user, Col. 4 lines 27-41, and wherein the control logic is capable to operable cause the user interface, 12, to display information corresponding to the imaging parameter settings.

As for claim 24, Rombult et al. teaches in Fig. 1 a data identification system wherein the pattern, 187, includes a consecutive series of sub-patterns, bar code lines, with each pattern encoding information relating to imaging data for the sheets, 24, on which that sub-pattern is formed, and wherein the control logic is operable to decipher each sub-pattern to identify the imaging data relating to that sub-pattern and to control the operation of the print engine according to the imaging data pertaining to a particular sheet being used, Col. 4 lines 16-41.

As for claim 25, Rombult et al. teaches in Fig. 1 a data identification system wherein the imaging data includes an expected number of sheets of media in the media stack on which the pattern is imprinted, the imaging device, 20, further comprising a user interface, 12, in communication with the control logic through, 30 and 14, and wherein the control logic is further operable to cause the user interface to generate a display corresponding, at least indirectly, to the expected number of sheets, Col. 4 lines 16-41.

As for claim 36, Rombult et al. teaches in Fig. 1 the method further comprising, identifying a sheet as being a sheet retrieved from the media stack, 24, via the picker 28, and forming an image on the sheet according to the data, Col. 4 lines 41-49.

As for claims 37 and 47, Rombult et al. teaches in Fig. 1 the method and computer readable medium, software, wherein the pattern, 187, encodes information corresponding to first data corresponding to a first media stack, 24, the method further

comprising: identifying a first sheet, 26, as being a sheet retrieved from the first media stack, 24, and instructing the formation of an image on the sheet according to the first data; and identifying a second sheet, 26, from a different stack as not being a sheet retrieved from the first media stack, 24 above, and instructing the formation of an image on the sheet, 26, according to second data different from the first data which corresponds to the data retrieved from scanning that second media stack, 24, Col. 4 lines 16-41, before loading into the imaging engine.

As for claim 40, Rombult et al. teaches in Col. 4 lines 16-41 a computer, 14, readable medium, software, having instructions for: directing a transport mechanism, 40, to move trays, 34 and 36, between a first position media and a second position; causing a sensor, 61, to scan a pattern, 187, on a side of the media stack, 24, as the transport mechanism, 40, moves the trays 36 and 34, between the first position and the second position, the pattern, 187, encoding information corresponding to data about the sheets, i.e. size, type, number,; and deciphering the pattern to identify the data.

As for claim 41, Rombult et al. teaches in Col. 4 lines 16-41 the medium, software, wherein the pattern, 187, encodes a reference, i.e. information about the contained sheets, and the control logic couple to the system and sensor, 61, are operable to retrieve an entry in a look-up table corresponding the reference in the image engine, 20, the entry including the data which will control the motion of the handler 18, Col. 4 lines 27-41.

As for claim 42, Rombult et al. teaches in Col. 4 lines 16-41 the medium, software, wherein the data, Col. 4 lines 16-27, found in the image engine includes

parameter settings and the control logic is operable to decipher the pattern, 187, to identify the parameter settings according to the size and thickness of those sheets.

As for claim 43, Rombult et al. teaches in Col. 4 lines 16-41 the medium, software, wherein the data, Col. 4 lines 16-27, a includes a media type, i.e. different sizes and thickness, and the control logic coupled to the image engine and sensor, 61, is operable to decipher the pattern, 187, to identify the media type, Col. 4 lines 27-41.

As for claim 44, Rombult et al. teaches in Col. 4 lines 16-41 the medium, software, having the control logic coupled to the image engine and sensor, 61, is operable to select parameter settings according to the media type, Col. 4 lines 38-41.

As for claim 45, Rombult et al. teaches in Col. 4 lines 16-41 the medium, software, having further instructions for causing a user interface, 12, to generate a display corresponding, at least indirectly, to the data.

As for claim 46, Rombult et al. teaches in Col. 4 lines 16-41 the medium, software, having further instructions found on the software for identifying a sheet, 26, as being a sheet retrieved from the media stack, 24, and instructing the formation of an image on the sheet according to the data, Col. 4 lines 41-49.

As for claim 48, Rombult et al. teaches in Col. 4 lines 16-41 the medium, software, wherein the pattern, 187, includes a consecutive series of sub-patterns, bar code lines, with each sub-pattern, those bar code lines, encoding information relating to the data, Col. 4 lines 16-27, for the sheets, 24, on which that sub-pattern is formed, and wherein the control logic is operable to decipher each sub-pattern to identify the data relating to that sub-pattern, Col. 4 lines 27-41.

As for claim 49, Rombult et al. teaches in Col. 4 lines 15-41 the medium, software, wherein the data found in the image engine, 20, includes an expected number of sheets of media, Col. 4 lines 16-27, in the media stack, 24, on which the pattern, 187, is imprinted, and the control logic is operable to decipher the pattern, 187, to identify the expected number of sheets in that media stack, 24.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 26 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Morita et al. (JP 05-294483A) in view of Rombult et al. (5,992,324).

As for claims 26 and 27, Morita et al teaches an imaging device, in Fig. 1, comprising: a print engine, near 8, operable to form an image on a sheet of media, S; a first media source, C1, operable to supply a first media stack, P1, the first media source, C1, including: a first tray, B, for holding the first media stack, P1, the first media stack, P1, a first transport mechanism, 40, operable to move the first tray, between a first position and a second position; a first sensor, PC, positioned to scan the sheet stack, P1, as the first transport mechanism, M1, moves the first tray, B, between the first position, loading position, and the second position, feeding; a second media source, C2, operable to supply a second media stack, P2, the second media source, C2, including: a second tray, B, for holding the second media stack, P2,a second transport

mechanism, M2, operable to move the second tray, B, between a first position, loading, and a second position, feeding; a second sensor, PC, to scan the second stack of media, P2,as the second transport mechanism, M2, moves the second tray, B, between the first position and the second positions; a transfer mechanism, 11a, operable to transfer sheets of media, S, from the first and second media sources, C1 and C2, to the print engine, located near 8. Morita et al. remains silent regarding if the media stacks contain patterns, wherein encoding information corresponding to first and second imaging data are found in the pattern, wherein control logic is in communication with the first and second media sources, the print engine, and the transfer mechanism; the control logic operable to decipher the first and second patterns to identify the first and second imaging data and to control the operation of the transfer mechanism and to control the operation of the print engine so that the first imaging data is used when a media sheet is transferred from the first media source and the second imaging data is used when a media sheet is transferred from the second media source; and a user interface in communication with the control logic, wherein the control logic is operable to cause the user interface to generate a display corresponding, at least indirectly, to the first and second imaging data.

Rombult et al. teaches in Col. 4 lines 16-41 media stacks containing patterns, 187, in Fig. 7, wherein encoding information corresponding to first and second imaging data are found in the pattern i.e. type, size number, and thickness, wherein control logic found in the softwear and sensor, 61, communicates with the first and second media sources found in the handler, 18, which moves the sources to a first and second positions, the print engine, 20, and the transfer mechanism, 18 and 40; the control logic

operable to decipher the first and second patterns, 187, to identify the first and second imaging data and to control the operation of the transfer mechanism and to control the operation of the print engine, 20, so that the first imaging data is used when a media sheet is transferred from the first media source and the second imaging data is used when a media sheet is transferred from the second media source; and a user interface, 12, in communication with the control logic through computer 14 and the software, wherein the control logic is operable to cause the user interface to generate a display corresponding, at least indirectly, to the first and second imaging data. It would have been obvious to one of ordinary skill in the art at the time of invention to modify Morita et al. to include the pattern and the corresponding logic of Rombult et al. because it allows the system to determine the properties of the media sheet before feeding to the imaging engine, allowing the system to make the necessary changes to accommodate or not allow that media size, or type, therefore reducing the possibility of jamming and increasing printing quality.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew G. Marini whose telephone number is (571)-272-2676. The examiner can normally be reached on Monday-Friday 8:00 to 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Judy Nguyen can be reached on (571)-272-2258. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Matthew Marini

12/15/06

REN YAN
PRIMARY EXAMINER